

Name Index of Carbon Coatings

Classification of carbon films

	Carbon films														
Designation	1 Plasma- polymer films	2 Amorphous carbon films (diamond-like-carbon films / DLC)								3 Crystalline carbon films					
										Diamond films				Graphite films	
Thin film / thick film	Thin film	Thin film								Thin film			Thick film (free standing)		Thin film
Doping, additional elements		hydrogen-free			hydrogenated					undoped	doped	undoped	doped	undoped	
				modified			modified								
				with metal			with metal	with non-metal							
Crystal size on the growth side	.I.	(amorphous)								1 to 500 nm, nano- crystalline	0.5 to 10 µm, mikro- crystalline	0.1 to 5 µm	(5 µm to) 80 to 500 µm	80 to 500 µm	
Predomina- ting C-C- bond type	sp ² or sp ³ , linear bond	sp ²	sp ³	sp ²	sp ² or sp ³	sp ³	sp ²	sp ²	sp ³	sp ³	sp ³	sp ³	sp ³	sp ²	
Film No.	1	2.1	2.2	2.3	2.4	2.5	2.6	2.7	3.1	3.2	3.3	3.4	3.5	3.6	
Designation	Plasma- polymer film	Hydrogen- free amorphous carbon film	Tetrahedral hydrogen- free amorphous carbon film	Metal- containing hydrogen- free amorphous carbon film	Hydrogenated amorphous carbon film	Tetrahedral hydrogenated amorphous carbon film	Metal- containing hydrogenated amorphous carbon film	Modified hydrogenated amorphous carbon film	nano- crystalline CVD diamond film	micro- crystalline CVD diamond film	doped CVD diamond film	CVD diamond	doped CVD diamond	graphite film	
Recom- mended abbreviation	.I.	a-C	ta-C	a-C:Me	a-C:H	ta-C:H	a-C:H:Me (Me = W, Ti, ...)	a-C:H:X (X = Si, O, N, F, B, ...)	.I.	.I.	.I.	.I.	.I.	.I.	